INDEX.

Accidents, Railroad, 207.
Acre, the Statute and Customary, 179.
Adams' Patent Railway Carriages, 20, 63, 85.
——— Patent Wood Wheel for Railway Carriages, and Axle Lubricator, 110.
Address, Preliminary, 1.
Agricultural Engineering:—Improvement of the Lower Valleys of Rivers, 268.
Albertolli, Giacondo, 246.
Algebra, Advantages of in the Engineering Professions, 257.
Alps, Projected Tunnel through the, 11.
Anchor, Porter's Patent, 56.
Angle subtended between Two Base Lines Remarks on Measuring the, 13.
———(Right), on Laying down by the Chain, 125.
Arches, Great Care necessary in Building, 14.
Archimedes Steam Yacht, 105, 165.
Architectural Anomalies, 244.
——————— Competitions, 7.
——————— Designs Exhibition, 101, 127, 160.
——————— Reputation, 218.
——— ——— Society, 142, 260.
Art (Modern) in Germany, 184.
Association (British) for the Advancement of Science, 234.

Bakewell's Patent Angle Meter, 3.
Ballysimon Stone, 64.
Base and Perpendicular Instrument for Surveying, 43.
Beacon Lights, Captain Basil Hall on, 41.
Beauty in Simple Figures, Proportions of, 30, 57.
Belgium, Coal Mines of, 16.
Bell Rock Lighthouse, 127.
Blackfriars Bridge, 254.
Botanic Gardens, Design for the Royal, 87.
Branch rail-roads, 12.
Bricks, Floating, 80, 141.
——— Improved Method of Making, 87.
Bridges, on, 98.
——————— in Germany, Construction of, 249
——————— Suspension, and their Early Use, 148.
——————— Dredge on, 174, 250.
Bristol Docks, 37, 53.
Brown's Hydraulic Level, 43.
Buildings, Record of Public, 46, 71.

Cemeteries, on the Establishment and Improvement of, 169
Chair, Patent Malleable Iron, 64.
Chimneys and Chimney Pots, 35, 156.
Chimneys, Smoky, 180.
Civil Engineers', Institution of, 241.
——————— Proceedings of, 44, 67, 90, 162, 188, 213, 236, 260, 276.
——————— College for, 151, 175.
Clegg's Atmospheric Railway, 140.
Club-House, Reform, 6.
Coal Mines of Belgium, 16.
Committee appointed by the Lords of the Treasury in pursuance of the Addresses of the House of Commons, Report of the, 113.
Competitions, Architectural, 7.
Cornish Steam Engines, on the Duty performed by, 230.
Correspondence, 86, 112, 141.
Cowell's Patent Sash Suspender, 154.

Diagonal Distance through a Building, Ascertaining the, 42.
Diurnal Variation of the Magnetic Needle at Falmouth, 62.
Dredge on Suspension Bridges, 174.
Dredge's Taper-chain Bridge, 129.

Earthwork upon Railways, 252.
Elizabethan Shop Fronts, 167.
Engines, Four-wheel and Six-wheel, 181.
Engines, Four-wheel, in Britain, Peculiarities of the, 217.
——————— Education, 195.
——————— Hydraulic, 121.
Engineering, Agricultural; improvement of the Lower Valleys of Rivers, 268.
——————— Arts, and the Physical Sciences, connection of the, 25.
Engravings, Wood:—Statute of Telford, &c., 75.
Exchange, Royal, 33, 42, 60, 105, 145, 203, 219.

Fawcett and Co.'s Establishments at Liverpool, 87.
French Academy of Sciences, 17.
Fulham College, 208.

Gates (Lock) of the Thames and Medway Canal at Rochester, 15.
Genius: its Character, Reward, and Fate, 97.
Geodesy, Progress of, 146.
Geographical (Royal) Society, 161.
Government and Public Works, 109.
Grecian and Gothic Architecture Contrasted, 221.

Hill, Measuring and Plotting a, 247.
Hints to Engineers, 109.
Houses of Parliament, Stone for the New, 9.
——————— ——————— Progress of the 89.
Hydraulic Engineering, 121.
Hydrostatico-Pneumatic Letter Balance, Sharp's, 90.

Inaccessible Distances, Determining, 65, 84, 140, 157.
Institutions, Scientific and Professional: their Advantages to Individuals and the Public, 73.
Iron-built and Timber-built Ships, Comparative Efficiency of, 131.

Kentish Coast, 225.
Land-Slip in Dorsetshire, Recent, 21.

Laves' Bridges, 249.
Lighthouse erected at Fleetwood, Elevation of the, 108.
Lock Gates of the Thames and Medway Canal at Rochester, 15.
London and South Western Railway, 52.
London Docks, New Warehouses of the, 137.

Maidenhead Bridge on the Great Western Railway, 20, 28, 29, 77.
Manufacturing Arts, Progress of, Abroad, as regards Machinery, 259.
Markets, Taste as displayed in the London.
Measuring of the Angle subtended between Two Base Lines, Remarks on, 13.
Medina, Navigation of, 20, 36.
Miscellaneous, 23, 47, 71, 94, 119, 143, 167, 191, 215, 238, 262.
Mohopoly, Railway, 265.
Mount's Bay Breakwater, 66, 83.
Munich, Architecture and Fresco Painting, 123.

Nature and Art, the Analysis of, 134.
Nautical Men, Astronomers, and others, Tables for the use of,
Nelson Monument, Trafalgar Square and the, 171, 208.
Notes on Buildings; or Morsels of Criticism, 247.

Oblique Lines to the Horizontal Plane, to render, 180.
Oscillating Steam Engine, 14.

Pacific Steam Navigation Company, 118.
Parliament, the New Houses of, 9, 89, 220.
Patents, 23, 48, 71, 96, 120, 144, 168, 192, 216, 240, 263.
Paving Streets, Improved Plan for, 248.
Pediometer, an Instrument for computing the Contents of Maps, 161.
Perspective, 153, 177.
Peterborough a Port, 32.
Philadelphia (The), American Locomotive Engine, Experiments with, 181.
Photogenic Drawing to Architecture, Importance of, 79.
Physical Sciences, Connection of the Engineering Arts and the, 25.
Pneumatic Railway Experiment on the Birmingham, Bristol, and Thames Junction Railway, 87.
Preliminary Address, 1.
Pressure of Earth against Sustaining Walls, 11.
Proportions for Bridges on the Highland Roads, Mr. Telford's Scale of, 15.
——————— involving Constants, 51.

Railroads, Branch, 12.
——— Accidents, 207.
Railway, Goods by,
——— Intelligence, 22.
——— London and Blackwall, 69.
——— Monopoly, 265.
——— Opening of the London and Southampton, 110.
——— Suspension, 15.
——— Suggestions, 230.
——— Wheel, Improved Metallic, 251.
Reefing Paddle-Wheels, Samuel Hall's Patent, 81.
Reform Club-House, 6.
Reservoirs (Artificial) and their Uses, 31.
Reviews, 39, 67, 86, 112, 143, 157, 182, 210, 252, 255.
Roofs, Bridges, &c., New System of Constructing, 224.
Royal Exchange, 33, 42, 60, 105, 145, 203, 219.
Royal Society, 92.

Salmon to Rivers, on the Means of bringing back, 125.
Sash Suspender, Cowell's Patent, 154.
Sewerage, London, 112, 155, 179.
Sciences, French Academy of, 17.
Scott's Monument, Glasgow, 118.
Screw-Jack, England's Patent Universal, 83.
——————— Curtis' Patent Traversing, 111.
Shop Decorations, and the Application of Glass to Architectural Details, 56.
Slopes in Excavations and Embarkments, Stability and Beauty of, 49.
Soldering Apparatus, New, 21.
Steam Engine, Oscillating, 14.
Stone for the New Houses of Parliament, 9.
Surveys, Parish, 59, 66, 231.
Surveying, 229.
——— (Land), more particularly Parish Surveying, on the Practice of, 149.
Sustaining Walls, Pressure of Earth against, 11.
Suspension Bridges and their Early Uses, 148.
——— Railway, 15.

Tables for the use of Nautical Men, Astronomers, and others, 273.
Taste, as displayed in the London Markets, 273.
Thames, Improvements necessary in the River, 68, 234.
Telford's Scale of Proportions for Bridges on the Highland Roads, 15.
Tide Observations, 84.
Trafalgar Square and the Nelson Monument, 171, 208.
Tunnel (Projected) through the Alps, 11.

Vandalism, Modern French, 176.

Water to the Metropolis, supply of Pure, 103.
Works, Record of Public, 46, 69, 93, 118, 143, 167, 190, 213, 238, 261.
Wyatville, Demise of Sir Jeffry, 61.

LIST OF PLATES, &c.

	PAGE
Reform Club House	*Frontispiece*
Pressure of Earth against Sustaining Walls	11
Angle subtended between Two Base Lines	13
Great Western Railway Bridge at Maidenhead	28
Ascertaining the Diagonal Distance through a Building	42
Base and Perpendicular Instrument for Surveying	43
Brown's Hydraulic Level	*ib.*
London and South-Western Railway	52
Porter's Patent Anchor	56
Proportions of Beauty in Simple Figures	57
Adams' Vertebrated Railway Carriage, with Bowspring Bearers and Tractors	33
Patent Malleable Iron Chair	64
Determining Inaccessible Distances	65
Mount's Bay Breakwater	67
Statue of Thomas Telford, in Westminster Abbey, &c.	75
England's Patent Universal Screw-Jack	83
Adams' Safety Carriage for Railways	85
Sharp's Hydrostatic-Pneumatic Letter Balance	90
Staines Bridge, Dredge's Patent Bridge, and Laves' Strut and Tie Bridge	98
Elevation and View of the Lighthouse erected at Fleetwood	108
Adams' Patent Wood Wheel for Railway Carriages, and Axle Lubricator	110
Bakewell's Angle Meter	111
Curtis' Patent Traversing Screw Jack	*ib.*
New Warehouses of the London Docks	137
Bell-Rock Lighthouse	*ib.*
The New Royal Exchange	145, 203
Cowell's Patent Sash Suspender	154
The Pediometer; an Instrument for Computing the Contents of Maps	161
Chapels of the South Metropolitan Cemetery	171
Perspective—Projection of a Cube	177
Greek Temples	182
York Minster	221
Proposed Improved Plan for Paving Streets	248
Laves' Bridges in Germany	249
Sections of Steam Ships	265